ENTOMOLOGICAL ITEMS.

Dr. A. S. Packard has editorial charge of the entomological department of *Garden and forest*, a new weekly journal of horticulture, landscape art and forestry. The first numero is dated 29 Feb. 1888.

The Colorado potato-beetle in Europe.—The Colorado potato beetle has appeared in large numbers upon the potato-fields of Malitzsch, a village near Dommitzsch, in Saxony. It is believed, from the abundance of the beetles, that the species must have been introduced into that locality several years ago. The Prussian government is taking vigorous measures to exterminate the pest.—*Amer. naturalist*, Nov. 1887, v. 21, p. 1030.

Trap-door spiders.—Rev. Nendick Abraham communicates a brief paper to the Proceedings of the Zoological society of London, (1887, p. 40-43) "On the habits of the tree trap-door spider of Graham's Town," in which he describes the mode of construction of the nests of these spiders in crevices and holes of the bark of trees, the way in which they hold the door of their nests closed, how they catch their prey, and other habits.

Mental powers of spiders.—The second numero of the *Journal of morphology* (December 1887, issued in March 1888) contains a paper by George W. and Elizabeth G. Peckham, entitled, "Some observations on the mental powers of spiders." The paper fills thirty-six pages, and is subdivided as follows: 1, introduction; 2, sense of smell; 3, hearing; 4, maternal emotions; 5, sense of sight; 6, color-sense; 7, feigning death; 8, mistakes of spiders.

Nectar-secreting plant-lice. Oregon is the place for nectar-secreting plant-lice. During the past fall I received twigs of spruce and willow from that state, which, though not more than six inches [15 cm.] long, contained at least a tablespoonful of crystallized sugar, which was both pleasant and sweet. This insect is a species of *Aphis*, and though possibly not equal to the bee, or to the manufacturer of our best cane-sugar, in her power to form an excellent article of sugar does surpass greatly the glucose factories in the quality of the product which she turns out. —A. J. Cook (*Science* 29 Jan. 1886, v. 7. p. 102).

A scourge of mosquitoes.—The city of Mexico, for a number of months past, has been afflicted with a scourge of mosquitoes. These insects have prevailed to such an extent that they have been a constant theme of discussion, and have, in a number of instances, caused sickness, and, it is said, even death, by their poisonous bites. Official bulletins have been issued by the director of statistics, Dr. Peñafiel, seeking information as to their habits, natural history, etc. Singularly, the species, which is a large one, has not been known, or at least has not attracted attention before the past year; and fears are entertained that the pest is of recent introduction. The varying abundance of different kinds of insects during different years renders such a view improbable; yet it is significant that the present species is new to science, never having been described by entomologists.—*Science*, 15 Jan., 1886, v. 7, p. 46.

Parasitic tineids, and wasps friendly to birds. — Occaionally, in a narrative of travels an interesting observation on insec-habits is made, and is very apt to be overlooked. Mr. E. A. Schwarz has handed us the following notes from "Die thierwelt im holländischen Guiana" von Aug. Kappler, *Ausland*, 1885. P. 617. No. 31. Speaking of *Bradypus cucculiger* [corr]. (Faulkner), an animal of the size of a cat, covered with a fur of dense hair-like wool; and belonging to the *Edentata*, he says "In this thick fur there lives as a parasite, a tineid, which when the animal is dead comes forth by the dozen and flies away." A parasitic tineid is certainly a curiosity.

P. 699, No. 35. Speaking of birds of the genus *Cacicus*, several of which inhabit Guiana, he says "Very remarkable are their friendly relations with several species of

Polistes, well known to the Indians and negroes. The nests of these birds are never seen without a nest of these wasps in the immediate vicinity—sometimes so near that the bird when entering its own nest, touches the combs of the wasps, which are not at all disturbed by this proceeding; but they vigorously resist any attempt to disturb the birds nests. I know three species which are thus friendly with these birds."—*Entom. americana*, Dec. 1885, v. 1, p. 178-179.

Mimetic coloration of pupae of butterflies.—In a paper by Gervase F. Mathew, entitled, "Life history of three species of western Pacific rhopalocera" (Trans. Entom. soc. Lond., 1885, p. 357-368), p. 364-365, after some remarks on the method employed by the author in rearing butterflies on board ship in empty biscuit tins, the following statement occurs :—

"The tins were secured upon a table in my cabin, and on the wall behind these were some pictures framed in maroon-colored velvet. One morning I noticed that a larva of *Papilio godeffroyi* had attached itself to a leaf which was almost touching one of these frames, and when I looked at it the next morning I was surprised to see that it had changed to a chrysalis of a beautiful deep rose-color. After this I thought I would try some experiments, so I pinned some twigs, to which were attached larvae that were on the point of changing, to pieces of cork, to which I had gummed scarlet, blue, black, yellow and white papers. Those placed on scarlet and white changed to rosy-pink chrysalids, those on blue and yellow to green, and those on black to very dark green. The chrysalids of *Papilio godeffroyi* have a thinner shell, and are more delicate than those of *Papilio schmeltzi*, and in consequence they were probably more susceptible to rays of light, for the former were more influenced by the color of the background than the latter. The newly changed chrysalids of both species were pale green, and it was not until several hours had elapsed that they assumed the color of their surroundings. They are also very soft, and are covered with a thin coating of some viscid substance, which may have the power of absorbing refracted rays of color-light as they dry and harden."

Vitality of the larvae of Balaninus—In an article entitled "Vitality of the larvae of the nut-weevil," by F. W. Leggett, in the *Journal of the New York microscopical society*, for February 1886, v. 2, p. 30-31, the author writes :

Desiring to bleach a larva [of *Balaninus*] without destroying any of its softer parts, I placed one in a six-inch test-tube, filled to within one-half inch of its capacity, with peroxide of hydrogen, and here follows the result, as copied from memoranda made by me at the time : Put larva in test-tube at 7 p. m., Jan. 7th. Took it out at 5 p. m., Jan. 8th. Cut off a part of the side of the larva and mounted the piece cut off. At 7, the same evening, the creature was very lively. Placed it on a slide and looked at it through the microscope. The creature continued very lively the whole evening, altho the moisture from the wounded part dried, and fastened the larva firmly to the slide. Jan. 9th, 7.45 a. m., the the creature was still alive, altho the posterior end near the wound continued to be hard and dry. On Jan. 10th, at 2 p. m., I placed another larva of the nut-weevil in the same test-tube with the same peroxide of hydrogen. Like the former one, it immediately sank to the bottom, where it remained until Jan. 14th, at 7 p. m., when I removed it to a glass cup and laid it on its side. Into this cup I poured about twenty drops of water. On Jan. 15th, at 8.30 a. m., I found the creature expanding and contracting itself. Thinking that this motion might be an optical delusion on my part, I showed it to two members of my family. Both saw the movement distinctly, and further, when I touched the creature with a needle, saw it raise its head in an unmistakaby living manner. On Jan. 16, this larva was living and active.

No. 143 was issued 9 March 1888.